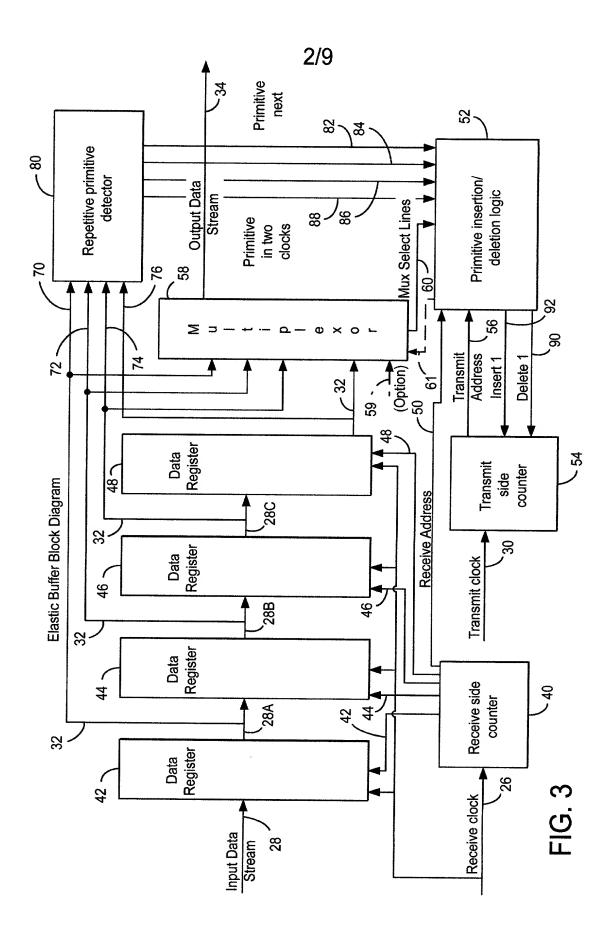


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LOCK RATES FOR ANY SERIAL PROTOCOL



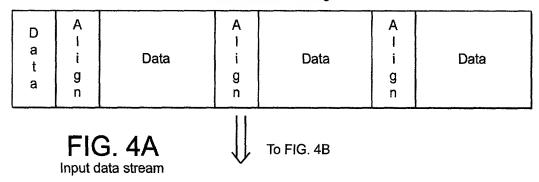
APT-002

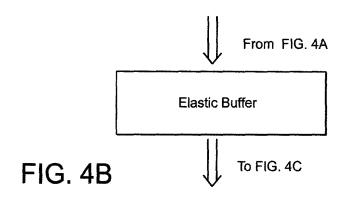
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ELASTIC SERIAL BUFFER TO COMPENSATE FOR DIFFERENT TRANSMIT AND RECEIVE LOCK RATES FOR ANY SERIAL PROTOCOL

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APT Elastic Buffer Manager





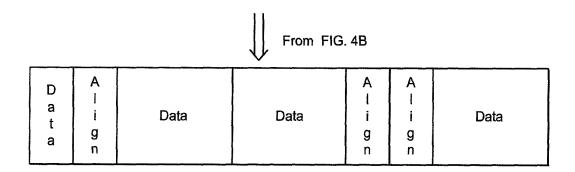


FIG. 4C Output data stream

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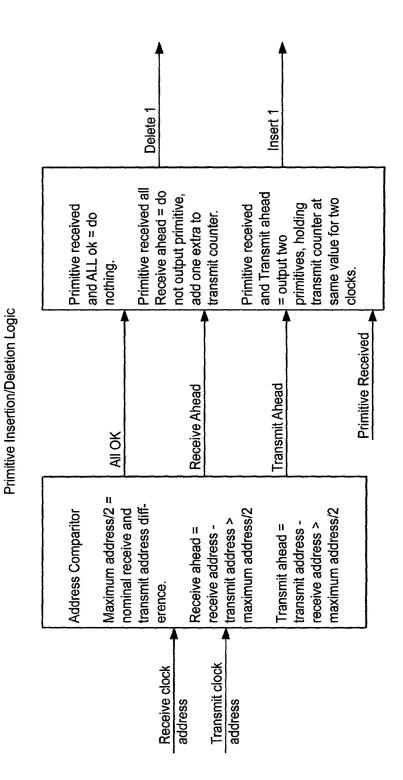
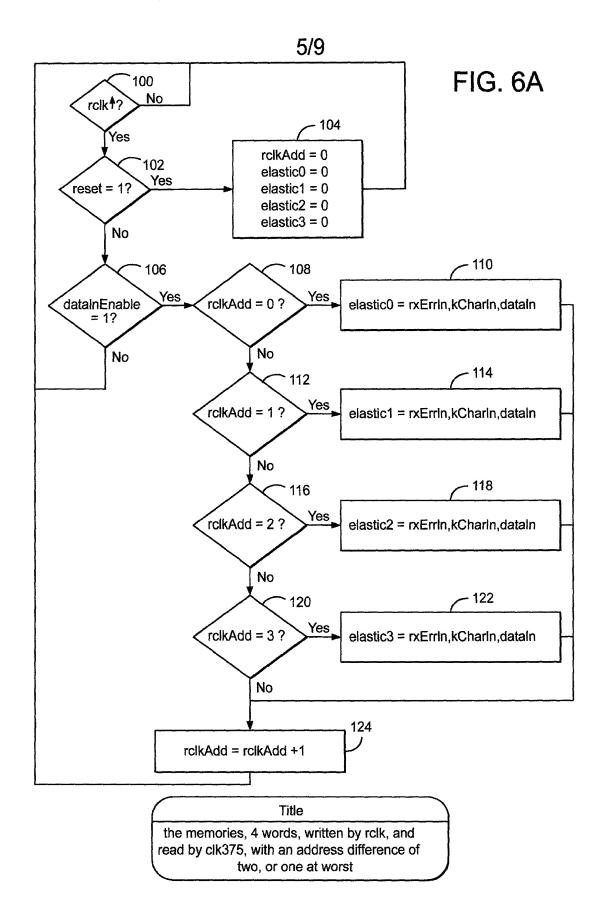


FIG. 5

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Title: ELASTIC SERIAL BUFFER TO COMPENSATE FOR DIFFERENT TRANSMIT AND RECEIVE

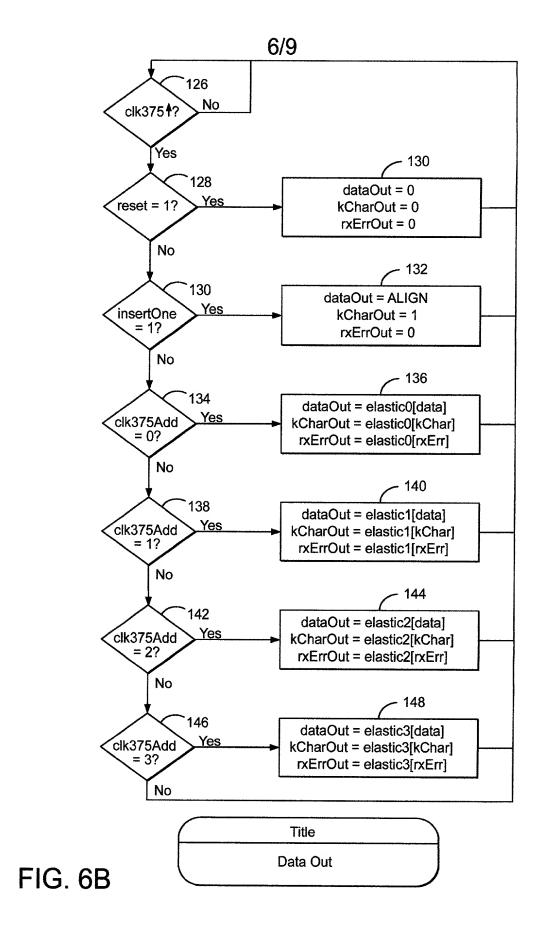
LOCK RATES FOR ANY SERIAL PROTOCOL



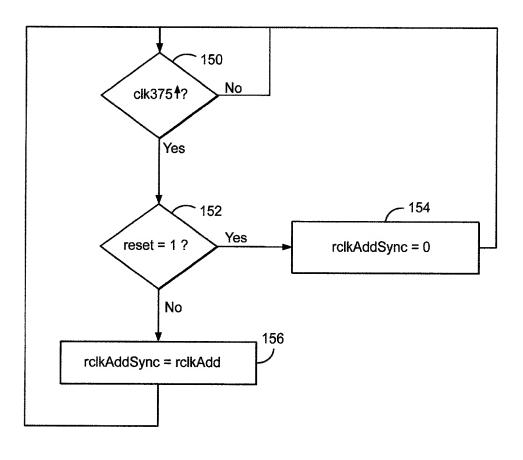
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Title
Synchronizer

FIG. 6C

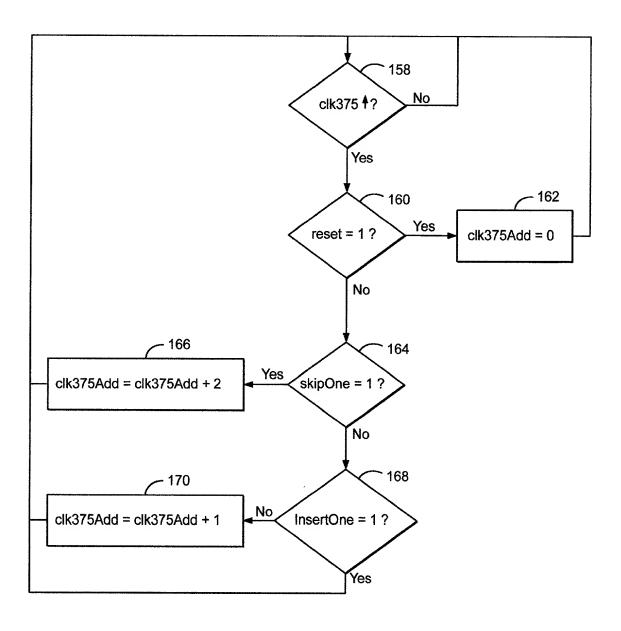
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mile that then the think in the

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ELASTIC SERIAL BUFFER TO COMPENSATE FOR DIFFERENT TRANSMIT AND RECEIVE LOCK RATES FOR ANY SERIAL PROTOCOL

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Title
The Two Counters

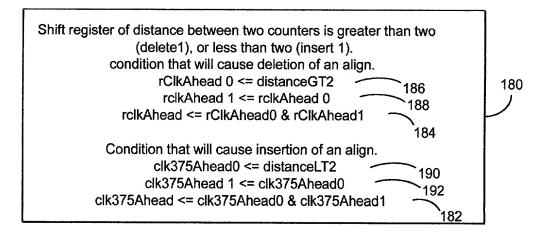
FIG. 6D

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Title: ELASTIC SERIAL BUFFER TO COMPENSATE FOR DIFFERENT TRANSMIT AND RECEIVE

LOCK RATES FOR ANY SERIAL PROTOCOL

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Distance Calculation:
distance = rclkAddSync - clk375Add
distanceGT2 = (distance > 2)
distance LT2 = (distance < 2)

178

176

Constant comparison of 4 data words to align character. Keeps track of when an align is at the data out. Insertion or deletion will happen at this time.

Output signals:

elastic0Align = elastic0 == ALIGN elastic1Align = elastic1 == ALIGN elastic2Align = elastic2 == ALIGN

elastic3Align = elastic3 == ALIGN

Title

Insert/delete comparisions

FIG. 7